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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/512,140	10/22/2004	Richard Hugh Clark	TS7607 US	1942

7590 03/10/2010

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EXAMINER	
MCAVOY, ELLEN M	
ART UNIT	**PAPER NUMBER**
1797	

MAIL DATE	DELIVERY MODE
03/10/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/512,140	CLARK ET AL.	
	Examiner	Art Unit	
	Ellen M. McAvoy	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *86-127* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *86-127* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submissions (new claims, remarks and an IDS) filed on 15 January 2010 have been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 86-127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlowitz et al (6,663,767) alone or in combination with Bacha et al (6,776,897).

As previously set forth, Berlowitz et al ["Berlowitz"] disclose a diesel fuel blended fuel composition which comprises an undercut conventional diesel fuel and a Fischer-Tropsch derived diesel fuel in amounts ranging from 5 to 90 vol. % of Fischer-Tropsch derived distillate, and 90 to 5 vol. % petroleum distillate. See the claims. Berlowitz teaches that the blended fuel demonstrates better than expected emissions and reduced sulfur content when used in a diesel engine. See column 2, lines 17-63. The Fischer-Tropsch derived diesel fuel is set forth in columns 3-4 wherein the Fischer-Tropsch derived hydrocarbon distillate has a T95 of at least

600°F, more preferably the Fischer-Tropsch derived distillate has an initial boiling point of at least 300°F and a T95 of at least 650°F, even more preferably an initial boiling point of at least 320°F and a T95 of at least 700°F to 750° F. See lines 49-54 in column 4. The examiner is of the position that the Fischer-Tropsch derived hydrocarbon distillate of Berlowitz meets the limitations of the Fischer-Tropsch derived gas oil of the claims. The blended fuel composition was subjected to engine testing wherein the blended diesel fuel was compared to conventional petroleum diesel fuels. Berlowitz teaches that significantly lower emissions and particulate matter were produced from the diesel fuel blend when compared to two different conventional diesel fuels. See column 6, line 59 to column 7, line 40.

Applicants' invention may differ in several of the dependent claims by adding a conventional additive, namely a detergent, to the diesel fuel blend which is not taught in Berlowitz. However, Bacha et al ["Bacha"] is added to teach that diesel fuel compositions containing Fischer-Tropsch derived diesel fuels may comprise conventional additives such as detergents. See column 5, line 48 to column 6, line 66. Having the prior art references before the inventors at the time the invention was made it would have been obvious to the skilled artisan to have added a detergent to the diesel fuel blended composition of Berlowitz if its known imparted property was so desired.

In response applicants presented new claims 86-127 which are essentially drawn towards a method of removing and/or reducing injector fouling and/or combustion related deposits in a diesel engine which comprises the step of combusting in the diesel engine a fuel blend comprising a sufficient amount of Fischer-Tropsch derived gas oil to produce a cleaned diesel engine. Applicants argued that Berlowitz does not disclose such a method of removing and/or

reducing injector fouling and/or combustion related deposits in a diesel engine. This is not deemed to be persuasive because the method of the independent claims essentially comprises the step of combusting in the diesel engine a fuel blend comprising an amount of Fischer-Tropsch derived gas oil which is clearly taught by Berlowitz as set forth above. Although reducing injector fouling and/or engine deposits is not specifically set forth in Berlowitz, reduction of particulate matter is briefly discussed in column 7, lines 37-40, and it has been held that the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. See *Atlas Powder Co. v. Ireco Inc.,* 190 F.3d 1342,1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Further the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best,* 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Thus the examiner maintains the position that Berlowitz meets the limitations of the above rejected claims.

In response applicants argued that the claims are method claims and the court cases relied on by the examiner are inapplicable because they pertain to composition/product claims. This is not deemed to be persuasive because the method of the independent claims essentially comprises the step of combusting in the diesel engine a fuel blend comprising an amount (unspecified) of Fischer-Tropsch derived gas oil which is clearly taught by Berlowitz as set forth above. The Fischer-Tropsch derived blended fuels of Berlowitz are being used for their known purpose as diesel fuels in compression-ignited (diesel) internal combustion engines. Berlowitz discloses that the blended diesel fuel demonstrates "better than predicted emission characteristics". Berlowitz discloses that emissions include "solid particulate matter (PM) and nitrogen oxides

(NOx)". According to applicant, the reduction of injector fouling and/or engine deposits of the claims is not disclosed in Berlowitz and the examiner has not established that removing injector fouling is an **established function** of the claimed fuel blend.

The examiner responds by asserting that the combination of familiar elements according to known methods is likely to be obvious when it does nothing more than yield predictable results. *KSR Int'l Co. v. Teleflex, Inc.,* 550 U.S. 398, 416 (2007). In resolving obviousness issues, the question is whether the improvement is more than a predictable use of prior art elements according to their established functions. *KSR,* 550 U.S. at 417. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.

In another words, if a claim extends to what is obvious, it is not patentable under §103. *KSR,* 550 U.S. at 419. See also *In re Munchmore*, 58 CCPA 719, 722, 433 F.2d 824, 826 (CCPA 1970). For this reason, the USPTO long ago adopted a practice, confirmed by binding court precedent, that any showing of unexpected results based on supposedly unpredictability, must be commensurate in scope with the breath of the claims. See *In re Grasselli,* 713 F.2d 731, 743 (Fed. Cir. 1983). The examiner is of the position that there is no evidence of record that the reduction of injector fouling and/or engine deposits in diesel engines is an unexpected result based on supposedly unpredictability of the blended diesel fuel composition disclosed in Berlowitz.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/
Primary Examiner
Art Unit 1797

EMcAvoy
March 8, 2010